

**Notice of Allowability**

Application No.

09/823,676

Applicant(s)

JIANG, CAI-ZHONG

Examiner

Cynthia Collins

Art Unit

1638

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed September 30, 2003.
2. ☒ The allowed claim(s) is/are 1,2,25,26,28,29,30 (renumbered 1-7).
3. ☒ The drawings filed on 22 June 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

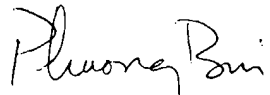
7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892)  | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)         |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 4 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____               | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment                 |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input type="checkbox"/> Examiner's Statement of Reasons for Allowance           |
|  | 9 <input type="checkbox"/> Other   |

  
PHUONG T. BUI 11/20/03  
PRIMARY EXAMINER

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jeffrey Libby on November 19, 2003.

It is noted that claims 7-16 and 18, indicated as "withdrawn" in the after-final amendment filed September 30, 2003, were in fact cancelled as set forth on page 2 of the reply filed February 10, 2003.

The application has been amended as follows:

**Cancel claims 17, 19-24 and 27 without prejudice.**

**Amend claims 1, 25 and 28, and add new claims 29 and 30:**

Claim 1. (Currently amended) A transgenic plant comprising a recombinant polynucleotide comprising:

(a) a nucleotide sequence encoding a polypeptide comprising SEQ ID NO: 2, or a sequence that is fully complementary to the nucleotide sequence encoding a polypeptide comprising SEQ ID NO: 2; or

(b) a nucleotide sequence comprising SEQ ID NO: 1, or a sequence that is fully complementary to the nucleotide sequence comprising SEQ ID NO: 1;

wherein expression of the nucleotide sequences recombinant polynucleotide comprising either (a) or (b) ~~encode a polypeptide that~~ increases a the plant's biomass as compared to a control plant not transformed with said recombinant polynucleotide.

Claim 25. (Currently amended) A transgenic plant comprising a recombinant polynucleotide comprising a polynucleotide sequence that hybridizes over its full length under stringent conditions to:

(a) a nucleotide sequence comprising SEQ ID NO: 1, or a sequence that is fully complementary to the nucleotide sequence comprising SEQ ID NO: 1; or

(b) a nucleotide sequence encoding a polypeptide comprising SEQ ID NO: 2, or a sequence that is fully complementary to the nucleotide sequence encoding a polypeptide comprising SEQ ID NO: 2;

wherein the stringent conditions comprise wash conditions of 0.2 x SSC to 2.0 x SSC, 0.1% SDS at 60-65° C, and wherein expression of the polynucleotide sequence that hybridizes to either (a) or (b) increases the plant's biomass as compared to a control plant not transformed with said recombinant polynucleotide.

Claim 28. (Currently amended) A method for producing a plant having increased biomass; said method comprising:

(a) providing an expression vector or cassette comprising a ~~nucleotide~~ polynucleotide sequence selected from the group consisting of:

- (i) a nucleotide sequence encoding a polypeptide comprising SEQ ID NO: 2 or a sequence that is fully complementary to the nucleotide sequence encoding a polypeptide comprising SEQ ID NO: 2;
- (ii) a nucleotide sequence comprising SEQ ID NO: 1 or a sequence that is fully complementary to the nucleotide sequence comprising SEQ ID NO: 1; and
- (iii) a nucleotide sequence that hybridizes under stringent conditions to ~~the a~~ nucleotide sequence of (i) or (ii), wherein the stringent conditions comprise wash conditions of 0.2 x SSC to 2.0 x SSC, 0.1% SDS at 60-65° C; wherein expression of the nucleotide sequence of (iii) increases the plant's biomass as compared to a control plant not transformed with said expression vector or cassette; and

(b) transforming a plant with the expression vector or cassette, thereby producing a plant that expresses the nucleotide sequence of (i), (ii) or (iii), with said plant having increased plant biomass as compared to a control plant not transformed with the ~~nucleotide sequences of (i), (ii) or (iii)~~ expression vector or cassette.

Claim 29. (New) A transgenic plant comprising a recombinant polynucleotide comprising a polynucleotide sequence that hybridizes over its full length under stringent conditions to:

(a) a nucleotide sequence comprising SEQ ID NO: 1, or a sequence that is fully complementary to the nucleotide sequence comprising SEQ ID NO: 1; or

(b) a nucleotide sequence encoding a polypeptide comprising SEQ ID NO: 2, or a sequence that is fully complementary to the nucleotide sequence encoding a polypeptide comprising SEQ ID NO: 2;

wherein the stringent conditions comprise wash conditions of 0.2 x SSC, 0.1% SDS at 65° C, and wherein expression of the polynucleotide sequence that hybridizes to either (a) or (b) increases the plant's biomass as compared to a control plant not transformed with said recombinant polynucleotide.

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Claim 30. (New) A method for producing a plant having increased biomass; said method comprising:

(a) providing an expression vector or cassette comprising a polynucleotide sequence selected from the group consisting of:

- (i) a nucleotide sequence encoding a polypeptide comprising SEQ ID NO: 2 or a sequence that is fully complementary to the nucleotide sequence encoding a polypeptide comprising SEQ ID NO: 2;
- (ii) a nucleotide sequence comprising SEQ ID NO: 1 or a sequence that is fully complementary to the nucleotide sequence comprising SEQ ID NO: 1; and
- (iii) a nucleotide sequence that hybridizes under stringent conditions to a nucleotide sequence of (i) or (ii), wherein the stringent conditions comprise wash conditions of 0.2 x SSC, 0.1% SDS, at 65° C; wherein expression of the nucleotide sequence of (iii) increases the plant's biomass as compared to a control plant not transformed with said expression vector or cassette; and

(b) transforming a plant with the expression vector or cassette, thereby producing a plant that expresses the nucleotide sequence of (i), (ii) or (iii), said plant having increased plant biomass as compared to a control plant not transformed with the expression vector or cassette.

**Remarks**

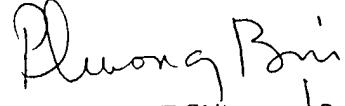
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Collins whose telephone number is (703) 605-1210.

The examiner can normally be reached on Monday-Friday 8:45 AM -5:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (703) 306-3218. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

CC

  
PHUONG T. BUI  
PRIMARY EXAMINER 11/20/03